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# FACSIMILE COVER LETTER

Our Ref.:	NOVE100042000 & NOVE110042000	U.S. Serial No.	10/823,355 & 12/169,238
Fax No. Called:	571-273-1446	Filed:	April 12, 2004 & July 8, 2008
Please Deliver To:	Examiner Alexa Neckel USPTO		
From:	Kelly M. Nowak		
Date:	May 11, 2010	Time:	

We are transmitting **5** pages (including this cover sheet)

## **MESSAGE:**

# POINTS OF DISCUSSION FOR EXAMINER INTERVIEW AFTER FINAL REJECTION

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### AFTER FINAL

DOCKETS: NOVE100042000 and NOVE110042000 PATENT

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTOR:	Robert Martinson et al.	)	EXAMINER:	Band, Michael A
1 <sup>st</sup> SERIAL NO.:	10/823,355 filed filed April 12, 2004	)	ART UNIT:	1795
2 <sup>nd</sup> SERIAL NO.:	12/169,238 filed July 8, 2008	)	DATE:	May 11, 2010
FOR:	Moving Interleaved Sputter Chamber Shields	) ) )		
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# POINTS OF DISCUSSION FOR EXAMINER INTERVIEW AFTER FINAL REJECTION

Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

### Dear Sir:

Applicants appreciate that granting of an Examiner's interview to be conducted May 12, 2010 at 2:00pm EST.

In this application, a Final Rejection Office Action was mailed February 18, 2010, to which applicants submitted an Amendment After Final dated April 21, 2010. An Advisory Action dated April 30, 2010 was mailed, to which this interview pertains.

Applicants would first like to note with appreciation the withdrawal of the nonstatutory obviousness-type double patenting rejection made in the Final Rejection.

### Point 1 for discussion:

For discussion during the interview, in the Advisory Action the Examiner points to pages 13-14 of Applicants Amendment After Final stating that applicants argued therein that the entire or all of the pedestal shield resides below a top surface of the

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pedestal plane as supported by applicants figs. 2-20, and not just a portion thereof as in Tepman et al., US Patent No. 5,589,224 (hereinafter "Tepman Ref 1"). The Examiner disagrees with applicants and takes the position that Figs. 2-20 of applicants' application clearly depict at least a portion of the pedestal shield represented by part [50]a-[50f] not being below the top surface of the pedestal. In view of the foregoing, the Examiner has maintained the rejection over Tepman Ref 1 and the corresponding interpretation thereof.

Applicants submit that this is an inaccurate interpretation of applicants' invention. Again, during examination the "claims ... are to be given their broadest reasonable interpretation consistent with the specification, and ... claim language should be read in light of the specification as it would be interpreted by one of ordinary skill in the art." In re Am. Acad. of Sci. Tech. Ctr., 367 F.3d 1359, 1364 [70 USPQ2d 1827] (Fed. Cir. 2004).

In connection with Figs. 1-4, and in particular the exploded view of Fig. 4, it is clearly shown and recited in paragraph [0046] that "all portions of the pedestal shield are below the plane of the top surface of pedestal ...", which "provides the particular advantage in that the components do not interfere with the loading and unloading of the wafer into and out of the deposition chamber."

As for Figs. 5 and 6, which show the inner portion 50a of the pedestal shield, these embodiments show modified versions of the sidewall and pedestal shields, however, it is clearly recited in paragraph [0049] that "[a]s before, when in the lowered pedestal position the sidewall and pedestal shields permit free and unhindered loading and unloading of the wafer to and from the pedestal." That is, like the exploded view of Fig. 4, all portions of the pedestal shield are below the plane of the top surface of pedestal. While it may not be clearly distinguishable due to the drawings being informal, reference numeral 50a on the right side of Fig. 5 clearly shows this portion 50a below the top plane surface of pedestal, and since the pedestal shield is a one-piece structure (as shown in Fig. 1) the entire pedestal shield resides below such top plane surface of the pedestal.

Figs 7-8 showing pedestal shield 50c and Figs. 13-14 showing pedestal shield 50f clearly show such pedestal shields (i.e., the entire pedestal shield) residing below the top plane surface of the pedestal.

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With respect to Figs. 9-10 showing pedestal shield 50d, the right side of Fig. 10 shows the pedestal shield residing below the pedestal top surface. Again, due to the informal nature of the drawings, it is clear from applicants' specification and other drawings that the entire pedestal shield is below the top plane surface of the pedestal so as to prevent interference of components with the loading and unloading of the wafer into and out of the deposition chamber. Likewise, with respect to Figs. 11-12, 15-18 and 19-20 it may be difficult to visualize that the entire pedestal shield resides below the top plane surface of the pedestal; however, upon reading the specification in light of the other drawings it is clear that this is what applicants intended for the present invention.

Applicants submit that the Examiner is merely examining the informal drawings without taking the language of the specification into account, which is clearly contrary to well settled case law. *Id.* Upon reading the present specification one of ordinary skill in the art would read that the claimed limitation of "the pedestal shield residing below a top surface plane of the pedestal ..." to be interpreted as the entire pedestal shield residing below the top plane surface of the pedestal so as to prevent interference of components with the loading and unloading of the wafer into and out of the deposition chamber, which is consistent with the specification. (See, at least paragraphs [0046] and [0049].)

It is noted that the Examiner does not argue against applicants' interpretation of Tepman Ref 1 only disclosing a portion of a pedestal shield residing below a top surface of a pedestal plane. Bearing the foregoing in mind, it is submitted that the rejection over Tepman Ref 1 should not and cannot be maintained.

### Point 2 for discussion:

In the Advisory Action the Examiner states that applicants attacked the Chung reference with respect to the claimed curvatures. This is completely an inaccurate analysis of applicants arguments submitted in their Amendment After Final. On the contrary, referring to pages 15-16 of the Amendment After Final applicants clearly argued against Tepman Ref 1 as disclosing these claimed features. In particular, applicants submitted

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"Applicant continues to submit that Tepman Ref 1 also does not disclose, contemplate or suggest the claimed curvatures of the pedestal or sidewall shields. In particular, Tepman discloses with reference to Fig. 1 a cylindrical shield 10 mounted to a support ring 4. In the raised position, this shield 10 does extend inwardly and downwardly with a lower end thereof 13 extending inward and disposed below the support 16 upper surface; however, unlike that of the present invention the lower end of the shield 10 is adjacent the annular shield ring 20 lower portion - -not the pedestal shield upper portion Moreover, the flange 15 at the lower end of the shield 10 extends as is claimed. upwardly to contact a lower or bottom surface of the shield ring 20. (Figs. 1 and 3; Col. 3, Il. 14-31.) That is, pedestal shield 10 and sidewall shield 60 do not cooperate in the raised position to avoid contact with each other and prevent line-of-sight deposition transmission from the sputter target to the side and lower walls of the deposition chamber, as is claimed. As for the configuration of Fig. 5 of Tepman, again, there is no attachable shield such that any sidewall shield 60 would be able to prevent line-of-sight deposition transmission therewith."

### Point 3 for discussion:

The Examiner has also cited Tepman et al., US Patent No. 5,803,977 (hereinafter "Tepman Ref 2") for the claimed limitation of a separate isolated ring; however, for the reasons of record it is submitted that Tepman Ref 2 does not overcome the deficiencies of Tepman Ref 1 and/or Chung, alone or in combination.

### Conclusion:

Applicants submit that the application is in a condition for allowance, which action is respectfully solicited.

Respectfully submitted,

Kelly M. Nowak

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